

WHAT IS CLAIMED IS:

1. An imaging head unit comprising a plurality of imaging heads arranged along a direction intersecting a predetermined scanning direction, the imaging heads moving relative to a respective imaging surface in the scanning direction along the imaging surface,

wherein pixel update timings of the imaging heads are alterable in at least the scanning direction for individual the imaging heads.

2. The imaging head unit of claim 1, wherein each imaging head comprises a plurality of imaging elements and the alteration of a pixel update timing is implemented by altering an imaging timing by a duration which is determined by a ratio between a spacing error of an imaging element in the scanning direction and a scanning speed.

3. The imaging head unit of claim 2, wherein the alteration of the imaging timing is implemented by retarding the imaging timing.

4. The imaging head unit of claim 2, wherein the alteration of the imaging timing is implemented by advancing the imaging timing.

5. The imaging head unit of claim 1, wherein each imaging head comprises a plurality of imaging elements which are two-dimensionally arranged in a plane which is substantially parallel to the imaging surface, and the imaging head is rotatable about a line perpendicular to the imaging surface.

6. The imaging head unit of claim 1, wherein a scanning speed in the scanning direction is alterable.

7. The imaging head unit of claim 1, wherein each imaging head comprises a modulated light irradiation apparatus which irradiates light, which is modulated at each of pixels in accordance with image information, at an exposure surface which includes the scanning surface.

8. The imaging head unit of claim 7, wherein the modulated light irradiation apparatus comprises:

- a laser device which irradiates laser light;

- a spatial light modulation element at which numerous imaging element portions, which respectively alter light modulation states in accordance with control signals, are arranged in a two-dimensional arrangement, the spatial light modulation element modulating the laser light irradiated from the laser device; and

- a control section which controls the imaging element portions by the control signals, which are generated in accordance with the image information.

9. The imaging head unit of claim 8, wherein the spatial light modulation element comprises a micromirror device which includes numerous micromirrors arranged in a two-dimensional arrangement, angles of reflection surfaces of which micromirrors are respectively alterable in accordance with the control signals.

10. The imaging head unit of claim 8, wherein the spatial light modulation element comprises a liquid crystal shutter array which includes numerous liquid crystal cells arranged in a two-dimensional arrangement, which are respectively capable of blocking transmitted light in accordance with the control signals.

11. An imaging device comprising:

an imaging head unit including a plurality of imaging heads arranged along a direction intersecting a predetermined scanning direction, the imaging heads moving relative to a respective imaging surface in the scanning direction along the imaging surface, and pixel update timings of the imaging heads being alterable in at least the scanning direction for individual the imaging heads; and

a movement apparatus which relatively moves the imaging head unit in the predetermined scanning direction.

12. An imaging method which employs the imaging head unit of claim 1, comprising:

relatively moving an imaging unit, which includes the imaging head unit, along the imaging surface in the predetermined scanning direction for imaging;

altering pixel update timings for individual the imaging heads in accordance with a scale factor difference; and

implementing a conversion of an imaging scale factor in at least the scanning direction.

13. An imaging method which employs an imaging head unit, comprising the steps of:

relatively moving an imaging unit, which includes the imaging head unit, along the imaging surface in the predetermined scanning direction for imaging;

altering pixel update timings for individual the imaging heads in accordance with a scale factor difference; and

implementing a conversion of an imaging scale factor in at least the scanning direction.